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UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

GOOGLE LLC,	Case No. 5:21-cv-3220-TSH
Plaintiff/Counterclaim Defendant, v. ECOFACTOR, INC., Defendant/Counterclaim Plaintiff.	ANSWER DEMAND FOR JURY TRIA

5:21-cv-3220-TSH

TRIAL

ANSWER

Defendant, EcoFactor, Inc., a Delaware corporation ("Defendant," "Counterclaim Plaintiff," or "EcoFactor") through its undersigned counsel, hereby answers the Complaint for Declaratory Judgment filed by Plaintiff Google LLC ("Plaintiff," "Counterclaim Defendant," or "Google") as follows:

NATURE OF THE ACTION

- 1. EcoFactor admits that the Complaint purports to set forth a claim for declaratory judgment of non-infringement of U.S. Patent Nos. 8,740,100 ("'100 Patent"), 8,751,186 ("'186 Patent"), 9,194,597 ("'597 Patent") and 10,584,890 ("'890 Patent") (collectively, the "Asserted Patents") under Titles 28 and 35 of the United States Code, but otherwise denies the allegations of Paragraph 1 of the Complaint.
- 2. EcoFactor admits that it has filed a complaint with the Western District of Texas ("W.D. Tex."), Docket No. 6:21-cv-00428 (the "ecobee W.D. Tex. Action"), claiming that ecobee, Inc. infringed the Asserted Patents because ecobee designed, developed, manufactured, tested, used, offered for sale, sold, and/or imported "smart thermostats, smart HVAC systems, smart HVAC control systems, and components thereof," but otherwise denies the allegations of Paragraph 2 of the Complaint.
- 3. EcoFactor admits that the products accused in the ecobee W.D. Tex. Action are "smart thermostat systems, smart HVAC systems, smart HVAC control systems, and all components (including accessories) thereof." EcoFactor similarly admits that it has accused Google's Nest Thermostat and Nest Third Generation Learning thermostat of patent infringement in prior pending litigation, but otherwise denies the allegations of Paragraph 3 of the Complaint.
- 4. EcoFactor admits that it has previously asserted various patents at various times in cases pending against ecobee, Google, and others accusing various smart thermostats and HVAC systems, but otherwise denies the allegations of Paragraph 4 of the Complaint.

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THE PARTIES

6. Admitted.

5. Denied.

- 7. Admitted.
- 8. EcoFactor admits that the Complaint purports to set forth a claim for remedy under Titles 28 and 35 of the United States Code, but otherwise denies the allegations of Paragraph 6 of the Complaint.
 - 9. Admitted.
 - 10. Admitted.
 - 11.Admitted.

INTRADISTRICT ASSIGNMENT

12. Admitted.

FACTUAL BACKGROUND

- 13.EcoFactor admits that Google is headquartered at 1600 Amphitheatre Parkway, Mountain view, California, 94043. EcoFactor is without sufficient knowledge or information so as to form a belief as to the truth of the allegations contained in Paragraph 13 of the Complaint and therefore denies the same.
- 14.EcoFactor is without sufficient knowledge or information so as to form a belief as to the truth of the allegations contained in Paragraph 14 of the Complaint and therefore denies the same.
- 15.EcoFactor admits that it has filed other lawsuits against Google in the District of Massachusetts, the Western District of Texas, and the ITC asserting various patents, but otherwise denies the allegations of Paragraph 15 of the Complaint.
- 16.EcoFactor admits that it filed suit on November 12, 2019, against Google in the District of Massachusetts asserting infringement of four of EcoFactor patents and that the case is currently stayed pending the ITC case below, but otherwise denies the allegations of Paragraph 16 of the Complaint.

17.EcoFactor admits that it filed suit against Google at the ITC on November 22, 2019 (the "1185 Investigation"), asserting the same patents as those at issue in the Massachusetts action identified in Paragraph 16 of the Complaint. The 1185 Investigation determined, for example, that the accused Google products infringed the asserted claims of U.S. Patent No. 10,018,371, that the patent is not patent-ineligible under 35 U.S.C. § 101, and that respondents did not show that the patent was invalid under 35 U.S.C. §§ 102 or 103. Parties to the 1185 Investigation have petitioned for Commission review of certain findings in the administrative law judge's final initial determination. EcoFactor otherwise denies the allegations of Paragraph 17 of the Complaint.

18.EcoFactor admits that it filed suit on January 31, 2020, against Google, in the Western District of Texas, asserting four of EcoFactor's patents, and that the case is currently proceeding through discovery, with trial set for December 6, 2021, but otherwise denies the allegations of Paragraph 18 of the Complaint.

19.EcoFactor admits that it filed suit on February 25, 2021, against Google, in the ITC, asserting four of EcoFactor's patents, and that the case is currently proceeding through discovery, but otherwise denies the allegations of Paragraph 19 of the Complaint.

20. Admitted.

21.EcoFactor admits that it has filed four cases against Google's Nest line of smart thermostat products within the past 18 months asserting infringement of 12 of EcoFactor's patents—some of which Google has been found to infringe. EcoFactor further admits that it is presently asserting or has previously asserted claims of patent infringement against ecobee, Vivint, Inc., Alarm.com Inc., Johnson Controls Inc., Emerson Electric Co., Resideo Technologies, Inc., Honeywell International Inc., Siemens Industry, Inc., Siemens AG, Daikin Industries, Ltd., Schneider Electric USA, Inc., and Carrier Global Corp. EcoFactor otherwise denies the allegations of Paragraph 21 of the Complaint.

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22.EcoFactor admits that it is prepared and willing to enforce its patent rights			
EcoFactor otherwise denies the allegations of Paragraph 22 of the Complaint.			
23.Denied.			
COUNT I:			
DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '100			
<u>PATENT</u>			
24.EcoFactor realleges and incorporates by reference the foregoin			

24.EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

25. Admitted.

26.EcoFactor admits that the ecobee W.D. Tex. Complaint alleges infringement by certain accused products, such as the ecobee3 lite and ecobee SmartThermostat with Voice Control, but otherwise denies the allegations of Paragraph 26 of the Complaint.

- 27.Denied.
- 28.Denied.
- 29. EcoFactor admits that Google seeks the requested relief, but otherwise denies the allegations of Paragraph 29 of the Complaint.

COUNT II:

DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '186 PATENT

- 30.EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.
 - 31. Admitted.
- 32.EcoFactor admits that the ecobee W.D. Tex. Complaint alleges infringement by certain accused products, such as the ecobee3 lite and ecobee SmartThermostat with Voice Control, but otherwise denies the allegations of Paragraph 32 of the Complaint.
 - 33.Denied.

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35. EcoFactor admits that Google seeks the requested relief, but otherwise denies the allegations of Paragraph 35 of the Complaint.

COUNT III:

DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '597 PATENT

36. EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

37. Admitted.

38. EcoFactor admits that the ecobee W.D. Tex. Complaint alleges infringement by certain accused products, such as the ecobee3 lite and ecobee SmartThermostat with Voice Control, but otherwise denies the allegations of Paragraph 38 of the Complaint.

- 39. Denied.
- 40.Denied.
- 41. EcoFactor admits that Google seeks the requested relief, but otherwise denies the allegations of Paragraph 41 of the Complaint.

COUNT IV:

DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '890 **PATENT**

- 42. EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.
 - 43. Admitted.
- 44. EcoFactor admits that the ecobee W.D. Tex. Complaint alleges infringement by certain accused products, such as the ecobee3 lite and ecobee SmartThermostat with Voice Control, but otherwise denies the allegations of Paragraph 44 of the Complaint.
 - 45.Denied.

46.Denied.

47. EcoFactor admits that Google seeks the requested relief, but otherwise denies the allegations of Paragraph 47 of the Complaint.

PLAINTIFF'S PRAYER FOR RELIEF

48. EcoFactor denies the allegations and prayer for relief sought by Plaintiff.

ECOFACTOR'S COUNTERCLAIMS FOR PATENT INFRINGEMENT

49. Counterclaim Plaintiff, EcoFactor, Inc., a Delaware corporation ("EcoFactor" or "Counterclaim Plaintiff") through its undersigned counsel, for its counterclaims against Counterclaim Defendant ecobee, Inc. ("Counterclaim Defendant"), alleges as follows:

INTRODUCTION

- 50. These counterclaims arise from Counterclaim Defendant's unlawful infringement of the following United States patents owned by EcoFactor: U.S. Patent Nos. 8,740,100 ("'100 Patent"), 8,751,186 ("'186 Patent"), 9,194,597 ("'597 Patent") and 10,584,890 ("'890 Patent") (collectively, the "Asserted Patents"). EcoFactor owns all right, title, and interest in each of the Asserted Patents.
- 51. EcoFactor is a privately held company, having its principal place of business at 441 California Avenue, Number 2, Palo Alto, CA 94301. EcoFactor was founded in 2006 and is headquartered in Palo Alto, California. EcoFactor is a leader in smart home energy management services. EcoFactor delivers smart home energy management services that improve energy efficiency, reduce energy bills, and vastly increase demand response efficacy all while maintaining consumer comfort. EcoFactor's patented big-data analytics and machine learning algorithms collect and process massive amounts of residential data including home thermodynamics, family comfort preferences and schedules, plus external data such as weather to continually monitor, adapt and learn for optimum energy savings. The company provides homeowners significant cost savings and energy usage benefits. EcoFactor's award-winning service has been offered through channel partners such as utilities, energy retailers, broadband service providers, and HVAC companies.
- 52. EcoFactor transformed how homes use energy by applying advanced analytics to connected devices in the home. EcoFactor developed a suite of software known as the "EcoFactor Platform" that incorporates EcoFactor's patented data analytics and machine learning algorithms, as well as EcoFactor's award-winning

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smart HVAC control technologies. The EcoFactor Platform is software that runs on servers, including cloud servers, in the United States, and provides service to customers in the United States. The source code of the EcoFactor Platform, including for example the platform, quant, and mobile application source code, that comprises the EcoFactor Platform was designed by, created by, and is continuously maintained and improved by EcoFactor employees working in the United States. The EcoFactor Platform actively manages thermostats on occupants' behalf in intelligent ways that improve comfort while helping them save time, energy and money. Utilities, home service providers, and homeowners rely on EcoFactor for demand response, energy efficiency, and HVAC performance monitoring services. The EcoFactor Platform includes the software that practices EcoFactor's patents on these features. For example, the EcoFactor Platform includes EcoFactor's patented techniques for monitoring the health and performance of HVAC systems over time, smart thermostat scheduling to improve energy savings and optimize comfort for occupants, and thermodynamic modeling of the user's home and HVAC system to enable dynamic pre-cooling and pre-heating to further improve comfort, save energy, or both, by creating comfortable schedules that also shift energy usage out of periods of peak energy demand.

53. The patented innovations at issue in this action were invented by EcoFactor engineers and researchers. EcoFactor has played a significant role in the development and advancement of such improvements to energy management technology—and the domestic market for them. EcoFactor has expended tens of millions of dollars of research and development and technical services and support in the United States. In recent years, an explosion of imported products that infringe EcoFactor's innovative Asserted Patents has significantly eroded EcoFactor's market standing. This infringement action is about several patented improvements to smart thermostat systems, smart HVAC systems, and smart HVAC control

systems—which took years of research and millions of dollars in U.S. investments to develop, and which are infringed by Defendant's accused products.

PARTIES

- 54. Counterclaim Plaintiff EcoFactor is a privately held company, having its principal place of business at 441 California Avenue, Number 2, Palo Alto, CA 94301. EcoFactor was founded in 2006 and is headquartered in Palo Alto, California. EcoFactor is the sole owner of all right, title, and interest in each Asserted Patent.
- 55. Counterclaim Defendant Google LLC is a subsidiary of Alphabet Inc. with its principal place of business located at 1600 Amphitheatre Parkway, Mountain View, California 94043.

JURISDICTION AND VENUE

- 56. This court has original jurisdiction over EcoFactor's counterclaims pursuant to 28 U.S.C. §§ 1331 and 1338(a) because they arise under the patent laws of the United States, Title 35 of the United States Code, and supplemental jurisdiction over EcoFactor's counterclaims pursuant to 28 U.S.C. § 1367(a) because the counterclaims are so related to the Counterclaim Defendant's claims that they form part of the same case or controversy under Article III of the United States Constitution.
- 57. Venue is proper in this District under 28 U.S.C. §§ 1391(b) and 1400(b) because Google resides in this District, and also because Google is subject to personal jurisdiction in this District, and a substantial part of the events giving rise to EcoFactor's claims of infringement (such as the development and sale of Nest thermostats) occurred in this District.

THE TECHNOLOGY AND PRODUCTS AT ISSUE

58. The products accused of infringing ("Accused Products") one or more of the Asserted Patents are smart thermostat systems, smart HVAC systems, smart HVAC control systems, and all components (including accessories) thereof offered

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for sale by the Counterclaim Defendant, including the Google Nest Thermostat and Nest Third Generation Learning thermostat.

- 59. The Accused Products include thermostat systems that connect to and control an HVAC system, they include smart HVAC systems, and they include components of such systems such as, for example, hubs, panels, and remote sensors. These thermostat devices communicate over a network with other devices and systems offered by the Counterclaim Defendant. The Accused Products connect to the network managed by the Counterclaim Defendant via the Internet. For example, the Accused Products connect to Counterclaim Defendant's networked servers and data centers, online interfaces, and related accessories.
- 60. When connected as designed, the Accused Products form a smart thermostat system, smart HVAC system, and/or smart HVAC control system. Counterclaim Defendant's smart thermostat systems are "smart" because they are designed to connect to Counterclaim Defendant's servers and data centers (including, e.g., cloud-based servers and backend support), related online interfaces (including, e.g., mobile apps and web portals), and related accessories (e.g., remote temperature sensors), upon importation. Further, Counterclaim Defendant's smart thermostat systems are "smart" because they support and are marketed as providing features to end users that analyze thermostat and HVAC system data gathered by the smart thermostat systems.
- 61. The Accused Products constitute the "frontend" of the smart thermostat system, smart HVAC system, and/or smart HVAC control system. Such smart thermostat devices can be programmed using the servers and the network maintained by Counterclaim Defendant and which form the "backend" for the smart thermostat. Such smart thermostat systems can be programmed remotely with a web or mobile application offered by Counterclaim Defendant. The web or mobile application communicates with the smart thermostat via computer servers or data centers managed by the Counterclaim Defendant, who sells and imports the smart

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thermostat. Counterclaim Defendant allows an end user to use a web or mobile application on a mobile phone, tablet, laptop, or other computing device to control the smart thermostat systems, such as by adjusting temperature settings.

- 62. These smart thermostat systems also communicate data using the network. For example, Counterclaim Defendant's smart thermostat systems send and receive temperature data and/or temperature settings using the network.
- 63. Counterclaim Defendant's Accused Products are designed and specially made and adapted to infringe claims of the Asserted Patents and to embody a material part of the claimed inventions. The Accused Products are installed and used in the United States according to Counterclaim Defendant's design and instructions. Counterclaim Defendant has knowledge as well as notice of its infringement of each asserted patent at least as of the date of the ITC Complaint. Counterclaim Defendant knowingly induces and encourages the use of the Accused Products in the United States in a manner that infringes the asserted claims of the Asserted Patents. Counterclaim Defendant infringes the Asserted Patents directly, through making, using, selling, and/or offering for sale the Accused Products. Counterclaim Defendant also infringes the Asserted Patents indirectly, both for example through contributory infringement as well as through induced infringement. infringement of the Asserted Patents is also attributable to Counterclaim Defendant. Counterclaim Defendant and/or users of the Accused Products direct and control use of the Accused Products to perform acts that result in infringement the Asserted Patents, conditioning benefits on participation in the infringement and establishing the timing and manner of the infringement.

COUNT I:

INFRINGEMENT OF U.S. PATENT NO. 8,740,100

64. EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

65. The '100 patent, titled "System, Method and Apparatus for Dynamically Variable Compressor Delay in Thermostat to Reduce Energy Consumption," issued on June 3, 2014. Ex. 1 ('100 Patent). The inventor of the '100 Patent is John Douglas Steinberg. The '100 Patent is based on U.S. Pat. App. No. 12/774,580, filed on May 5, 2010, which claims priority to U.S. Provisional App. No. 61/215,816, filed on May 11, 2009. A true and correct copy of the '100 Patent is attached as Exhibit 1.

66. On information and belief, Counterclaim Defendant makes, uses, offers for sale, sells, and/or imports certain products ("Accused Products"), such as the Nest Thermostat and Nest Third Generation Learning Thermostat, including device-side and cloud-based features thereof, and related accessories, that directly infringe, literally and/or under the doctrine of equivalents, claims of the '100 Patent.

67. The infringement of the '100 Patent is also attributable to Counterclaim Defendant. Counterclaim Defendant and/or users of the Accused Products direct and control use of the Accused Products to perform acts that result in infringement of the patent, conditioning benefits on participation in the infringement and establishing the timing and manner of the infringement.

68. Counterclaim Defendant also knowingly and intentionally induces infringement of claims of the '100 Patent in violation of 35 U.S.C. § 271(b). Through at least the filing and service of the Complaint, Counterclaim Defendant has had knowledge of the '100 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '100 Patent, Counterclaim Defendant continues to actively encourage and instruct its customers and end users (for example, through user manuals and online instruction materials on its website) to use the Accused Products in ways that directly infringe the '100 Patent. Counterclaim Defendant does so knowing and intending that its customers and end users will commit these infringing acts. Counterclaim Defendant also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '100 Patent, thereby specifically intending for and inducing its

customers to infringe the '100 Patent through the customers' normal and customary use of the Accused Products.

- 69. Counterclaim Defendant has also infringed, and continue to infringe, claims of the '100 Patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Products, which are used in practicing the process, or using the systems, of the patent, and constitute a material part of the invention. Counterclaim Defendant knows the components in the Accused Products to be especially made or especially adapted for use in infringement of the patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. Accordingly, Counterclaim Defendant has been, and currently is, contributorily infringing the '100 Patent, in violation of 35 U.S.C. § 271(c).
- 70. The Accused Products satisfy all claim limitations of claims of the '100 Patent. A claim chart comparing claim elements of the '100 Patent to representative Accused Products, is attached as Exhibit 2.
- 71. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Counterclaim Defendant has injured EcoFactor and is liable for infringement of the '100 Patent pursuant to 35 U.S.C. § 271.
- 72. As a result of Counterclaim Defendant's infringement of the '100 Patent, EcoFactor is entitled to monetary damages in an amount adequate to compensate for Counterclaim Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Counterclaim Defendant, together with interest and costs as fixed by the Court.
- 73. Counterclaim Defendant's infringing activities have injured and will continue to injure EcoFactor, unless and until this Court enters an injunction prohibiting further infringement of the '100 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.
 - 74. EcoFactor's '100 patent is valid and enforceable.

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75. EcoFacto has complied with 35 U.S.C. ¶ 287.

COUNT II:

INFRINGEMENT OF U.S. PATENT NO. 8,751,186

76. EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

77. The '186 patent, titled "System and Method for Calculating the Thermal Mass of a Building," issued on June 10, 2014. Ex. 3 ('186 Patent). The inventors of the '186 Patent are John Douglas Steinberg and Scott Douglas Hublou. The '186 Patent is based on U.S. Pat. App. No. 13/858,710, filed on April 8, 2013, which is a continuation of U.S. Pat. App. No. 13/409,729, filed on Mar. 1, 2012, which is a continuation of U.S. Pat. App. No. 12/959,225, filed on Dec. 2, 2010, which is a continuation of U.S. Pat. App. No. 12/211,733, filed on Sept. 16, 2008. The '186 Patent also claims priority to U.S. Provisional App. No. 60/994,011, filed on Sept. 17, 2007. A true and correct copy of the '186 Patent is attached as Exhibit 3.

78. On information and belief, Counterclaim Defendant makes, uses, offers for sale, sells, and/or imports certain products ("Accused Products"), such as the Nest Thermostat and Nest Third Generation Learning Thermostat, including deviceside and cloud-based features thereof, and related accessories, that directly infringe, literally and/or under the doctrine of equivalents, claims of the '186 Patent.

79. The infringement of the '186 Patent is also attributable to Counterclaim Defendant. Counterclaim Defendant and/or users of the Accused Products direct and control use of the Accused Products to perform acts that result in infringement of the patent, conditioning benefits on participation in the infringement and establishing the timing and manner of the infringement.

80. Counterclaim Defendant also knowingly and intentionally induces infringement of claims of the '186 Patent in violation of 35 U.S.C. § 271(b). Through at least the filing and service of the Complaint, Counterclaim Defendant has had knowledge of the '186 Patent and the infringing nature of the Accused

Products. Despite this knowledge of the '186 Patent, Counterclaim Defendant continues to actively encourage and instruct its customers and end users (for example, through user manuals and online instruction materials on its website) to use the Accused Products in ways that directly infringe the '186 Patent. Counterclaim Defendant does so knowing and intending that its customers and end users will commit these infringing acts. Counterclaim Defendant also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '186 Patent, thereby specifically intending for and inducing its customers to infringe the '186 Patent through the customers' normal and customary use of the Accused Products.

- 81. Counterclaim Defendant has also infringed, and continue to infringe, claims of the '186 Patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Products, which are used in practicing the process, or using the systems, of the patent, and constitute a material part of the invention. Counterclaim Defendant knows the components in the Accused Products to be especially made or especially adapted for use in infringement of the patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. Accordingly, Counterclaim Defendant has been, and currently is, contributorily infringing the '186 Patent, in violation of 35 U.S.C. § 271(c).
- 82. The Accused Products satisfy all claim limitations of claims of the '186 Patent. A claim chart comparing claim elements of the '186 Patent to representative Accused Products, is attached as Exhibit 4.
- 83. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Counterclaim Defendant has injured EcoFactor and is liable for infringement of the '186 Patent pursuant to 35 U.S.C. § 271.
- 84. As a result of Counterclaim Defendant's infringement of the '186 Patent, EcoFactor is entitled to monetary damages in an amount adequate to compensate for Counterclaim Defendant's infringement, but in no event less than a reasonable

royalty for the use made of the invention by Counterclaim Defendant, together with interest and costs as fixed by the Court.

- 85. Counterclaim Defendant's infringing activities have injured and will continue to injure EcoFactor, unless and until this Court enters an injunction prohibiting further infringement of the '186 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.
 - 86. EcoFactor's '186 patent is valid and enforceable.
 - 87. EcoFacto has complied with 35 U.S.C. ¶ 287.

COUNT III:

INFRINGEMENT OF U.S. PATENT NO. 9,194,597

- 88. EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.
- 89. The '597 patent, titled "System, Method and Apparatus for Identifying Manual Inputs to and Adaptive Programming of a Thermostat," issued on Nov. 24, 2015. Ex. 5 ('597 Patent). The inventors of the '597 Patent are John Douglas Steinberg, Scott Douglas Hublou, and Leo Cheung. The '597 Patent is based on U.S. Pat. App. No. 14/082,675, filed on Nov. 18, 2013, which is a continuation of U.S. Pat. App. No. 12/778,052, filed on May 11, 2010. The '597 Patent also claims priority to U.S. Provisional App. No. 61/215,999, filed on May 12, 2009. A true and correct copy of the '597 Patent is attached as Exhibit 5.
- 90. On information and belief, Counterclaim Defendant makes, uses, offers for sale, sells, and/or imports certain products ("Accused Products"), such as the Nest Thermostat and Nest Third Generation Learning Thermostat, including device-side and cloud-based features thereof, and related accessories, that directly infringe, literally and/or under the doctrine of equivalents, claims of the '597 Patent.
- 91. The infringement of the '597 Patent is also attributable to Counterclaim Defendant. Counterclaim Defendant and/or users of the Accused Products direct and

control use of the Accused Products to perform acts that result in infringement of the patent, conditioning benefits on participation in the infringement and establishing the timing and manner of the infringement.

92. Counterclaim Defendant also knowingly and intentionally induces infringement of claims of the '597 Patent in violation of 35 U.S.C. § 271(b). Through at least the filing and service of the Complaint, Counterclaim Defendant has had knowledge of the '597 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '597 Patent, Counterclaim Defendant continues to actively encourage and instruct its customers and end users (for example, through user manuals and online instruction materials on its website) to use the Accused Products in ways that directly infringe the '597 Patent. Counterclaim Defendant does so knowing and intending that its customers and end users will commit these infringing acts. Counterclaim Defendant also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '597 Patent, thereby specifically intending for and inducing its customers to infringe the '597 Patent through the customers' normal and customary use of the Accused Products.

93. Counterclaim Defendant has also infringed, and continue to infringe, claims of the '597 Patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Products, which are used in practicing the process, or using the systems, of the patent, and constitute a material part of the invention. Counterclaim Defendant knows the components in the Accused Products to be especially made or especially adapted for use in infringement of the patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. Accordingly, Counterclaim Defendant has been, and currently is, contributorily infringing the '597 Patent, in violation of 35 U.S.C. § 271(c).

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- 94. The Accused Products satisfy all claim limitations of claims of the '597 Patent. A claim chart comparing claim elements of the '597 Patent to representative Accused Products, is attached as Exhibit 6.
- 95. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Counterclaim Defendant has injured EcoFactor and is liable for infringement of the '597 Patent pursuant to 35 U.S.C. § 271.
- 96. As a result of Counterclaim Defendant's infringement of the '597 Patent, EcoFactor is entitled to monetary damages in an amount adequate to compensate for Counterclaim Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Counterclaim Defendant, together with interest and costs as fixed by the Court.
- 97. Counterclaim Defendant's infringing activities have injured and will continue to injure EcoFactor, unless and until this Court enters an injunction prohibiting further infringement of the '597 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.
 - 98. EcoFactor's '597 patent is valid and enforceable.
 - 99. EcoFacto has complied with 35 U.S.C. ¶ 287.

COUNT IV:

INFRINGEMENT OF U.S. PATENT NO. 10,584,890

- 100. EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.
- 101. The '890 patent, titled "System and Method for Using a Mobile Electronic Device to Optimize an Energy Management System," issued on Mar. 10, 2020. Ex. 7 ('890 Patent). The inventor of the '890 Patent is John Douglas Steinberg. The '597 Patent is based on U.S. Pat. App. No. 16/374,246, filed on Apr. 3, 2019, which is a continuation of U.S. Pat. App. No. 16/264,050, filed on Jan. 31, 2019, which is a continuation of U.S. Pat. App. No. 15/616,719, filed on June 7, 2017,

which is a continuation of U.S. Pat. App. No. 14/491,554, filed on Sept. 19, 2014, which is a continuation of U.S. Pat. App. No. 14/048,932, filed on Oct. 8, 2013, which is a continuation of U.S. Pat. App. No. 12/788,246, filed on May 26, 2010. A true and correct copy of the '890 Patent is attached as Exhibit 7.

- 102. On information and belief, Counterclaim Defendant makes, uses, offers for sale, sells, and/or imports certain products ("Accused Products"), such as the Nest Thermostat and Nest Third Generation Learning Thermostat, including device-side and cloud-based features thereof, and related accessories, that directly infringe, literally and/or under the doctrine of equivalents, claims of the '890 Patent.
- 103. The infringement of the '890 Patent is also attributable to Counterclaim Defendant. Counterclaim Defendant and/or users of the Accused Products direct and control use of the Accused Products to perform acts that result in infringement of the patent, conditioning benefits on participation in the infringement and establishing the timing and manner of the infringement.
- 104. Counterclaim Defendant also knowingly and intentionally induces infringement of claims of the '890 Patent in violation of 35 U.S.C. § 271(b). Through at least the filing and service of the Complaint, Counterclaim Defendant has had knowledge of the '890 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '890 Patent, Counterclaim Defendant continues to actively encourage and instruct its customers and end users (for example, through user manuals and online instruction materials on its website) to use the Accused Products in ways that directly infringe the '890 Patent. Counterclaim Defendant does so knowing and intending that its customers and end users will commit these infringing acts. Counterclaim Defendant also continues to make, use, offer for sale, sell, and/or import the Accused Products, despite its knowledge of the '890 Patent, thereby specifically intending for and inducing its customers to infringe the '890 Patent through the customers' normal and customary use of the Accused Products.

- 105. Counterclaim Defendant has also infringed, and continue to infringe, claims of the '890 Patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Products, which are used in practicing the process, or using the systems, of the patent, and constitute a material part of the invention. Counterclaim Defendant knows the components in the Accused Products to be especially made or especially adapted for use in infringement of the patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. Accordingly, Counterclaim Defendant has been, and currently is, contributorily infringing the '890 Patent, in violation of 35 U.S.C. § 271(c).
- 106. The Accused Products satisfy all claim limitations of claims of the '890 Patent. A claim chart comparing claim elements of the '890 Patent to representative Accused Products, is attached as Exhibit 8.
- 107. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Counterclaim Defendant has injured EcoFactor and is liable for infringement of the '890 Patent pursuant to 35 U.S.C. § 271.
- 108. As a result of Counterclaim Defendant's infringement of the '890 Patent, EcoFactor is entitled to monetary damages in an amount adequate to compensate for Counterclaim Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Counterclaim Defendant, together with interest and costs as fixed by the Court.
- 109. Counterclaim Defendant's infringing activities have injured and will continue to injure EcoFactor, unless and until this Court enters an injunction prohibiting further infringement of the '890 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.
 - 110. EcoFactor's '890 patent is valid and enforceable.
 - 111. EcoFacto has complied with 35 U.S.C. ¶ 287.

WILLFUL INFRINGEMENT

- 112. EcoFactor realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.
- 113. Counterclaim Defendant had knowledge of EcoFactor's '100 Patent, '186 Patent, '597 Patent, and '890 Patent by at least the date of filing of the Complaint on April 30, 2021, in the Northern District of California.
- Patents and its patent portfolio, Counterclaim Defendant infringed and continues to infringe the Asserted Patents with full and complete knowledge of the patents' applicability to Counterclaim Defendant's smart thermostats and smart HVAC systems without taking a license and without a good faith belief that the Asserted Patents are invalid and not infringed. Counterclaim Defendant's infringement occurred, and continues to occur, with knowledge of infringement and objective recklessness, and/or with willful blindness to its infringement.
- Products (e.g., Google's Nest Thermostat and Nest Third Generation Learning thermostat) to customers despite its knowledge of EcoFactor's Asserted Patents, such as on store.google.com. Defendant also manufactured and imported into the United States, and continues to do so, the Accused Products for sale and distribution to its customers, despite its knowledge of EcoFactor's Asserted Patents.
- Patents is egregious because despite its knowledge of EcoFactor's Asserted Patents, Defendant deliberately and flagrantly copied the invention claimed in the Asserted Patents and implemented that patented invention in its Accused Products. Further, despite Counterclaim Defendant's knowledge of the Asserted Patents, Counterclaim Defendant sold, offered for sale, manufactured, and imported, the Accused Products—and continues to do so—without investigating the scope of the Asserted Patents and without forming a good-faith belief that its Accused Products do not

infringe or that the Asserted Patents are invalid. Counterclaim Defendant has not taken any steps to remedy its infringement of the Asserted Patents (e.g., by removing the Accused Products from its sales channels). Instead, Counterclaim Defendant continues to sell its Accused Products to customers, such as its continued sale of Nest Learning thermostat, for example. Counterclaim Defendant's behavior is egregious because it engaged, and continues to engage, in misconduct beyond that of typical infringement. For example, in a typical infringement, an infringer would investigate the scope of the asserted patents and develop a good-faith belief that it does not infringe the asserted patents or that the asserted patents are invalid before selling (and continuing to sell) its accused products. An infringer would also remove its accused products from its sales channels and discontinue further sales.

117. Thus, Counterclaim Defendant's infringement of the Asserted Patents is willful, deliberate, and flagrant, entitling Vivato to increased damages under 35 U.S.C. § 284 and to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

ECOFACTOR'S PRAYER FOR RELIEF

WHEREFORE, Defendant/Counterclaim Plaintiff EcoFactor, Inc. request that this Court enter:

- A. A judgment in favor of EcoFactor that Plaintiff/Counterclaim Defendant has infringed, either literally and/or under the doctrine of equivalents, the '100 Patent, the '186 Patent, the '597 Patent, and the '890 Patent;
- B. A permanent injunction prohibiting Plaintiff/Counterclaim Defendant from further acts of infringement of the '100 Patent, the '186 Patent, the '597 Patent, and the '890 Patent;
- C. A judgment and order requiring Plaintiff/Counterclaim Defendant to pay EcoFactor its damages, enhanced damages, costs, expenses, and pre-judgment and post-judgment interest for Plaintiff/Counterclaim Defendant's infringement of the '100 Patent, the '186 Patent, the '597 Patent, and the '890 Patent;

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D.	A judgment and order requiring Plaintiff/Counterclaim Defendant to
provide ac	ecountings and to pay supplemental damages to Plaintiff, including without
limitation	, pre-judgment and post-judgment interest;

- E. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to EcoFactor its reasonable attorneys' fees against Plaintiff/Counterclaim Defendant; and
- F. Any and all other relief as the Court may deem appropriate and just under the circumstances.

DEMAND FOR JURY TRIAL

Defendant, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

DATED: July 13, 2021 Respectfully submitted,

RUSS AUGUST & KABAT

Reza Mirzaie Marc A. Fenster C. Jay Chung James N. Pickens

By: /s/ Reza Mirzaie

James N. Pickens Minna Y. Chan

Attorneys for Defendant/Counterclaim Plaintiff ECOFACTOR, INC.